

Krolikowski, Wojciech

POLAND/Theoretical Physics

B-6

Abs Jour : Referat Zhur - Fizika, No 5, 1957, No 10882  
Author : Krolikowski Wojciech  
Inst : 0  
Title : Difficulties in Quantum Field Theory.  
Orig Pub : Postepy fiz., 1956, 7, No 5, 419-437  
Abstract : Survey article.  
Bibliography, approximately 60 titles.

Card 1/1

*KROLIKOWSKI, W.*

POLAND/Theoretical Physics - Quantum Electrodynamics

B-5

Abs Jour : Ref Zhur - Fizika, No 6, 1958, No 12374

Author : \*Krolikowski W., \*\*Rzewuski J.

Inst : \*Institute of Physics, Polish Academy of Sciences, Warsaw,  
\*\*Institute of Physics, Polish Academy of Sciences, Wroslaw,  
Poland.

Title : Relativistic Two-Body Problem in One-Time Formulation Se-  
paration of Angular Variables in the Case of One-Quantum In-  
teraction in Electrodynamics

Orig Pub : Acta phys. polon., 1956, 15, No 5, 321-341

Abstract : The authors consider simultaneous quantum relativistic  
equation for two fermions, obtained by them previously (Ref-  
erat Zhur Fizika, 1956, No 8, 21836; No 12, 33783). To se-  
parate the angle variables, use is made of the explicit form  
of the equation in the momentum space. The equation is in-  
tegro-differential. Only those terms, that describe the one-  
quantum interaction are retained in the expansion for the in-  
tegral kernel. The eigenfunctions of the operator of total

Card : 1/2

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KROLIKOWSKI, W.

POLAND/Theoretical Physics - Quantum Field Theory

B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 2729

Author : Krolkowski, W.

Inst : Institute of Physics, Polish Academy of Sciences, Poland

Title : The Representation Leading to Isobars of the Nucleon in the Fixed Source Theory.

Orig Pub : Bull. Acad. polon. sci., 1957, Cl. 3, 5, No 1, 55-58

Abstract : The article contains further considerations concerning the problem of isobars of the nucleon in the fixed-source theory (Pauli W., Dancoff S.M., Physical Review, 1942, 62, 86). It is shown in the work that if the approximate method is applicable in the symmetrical  $\pi$ -meson theory with slowly moving source representing the nucleon then there exists four isobars of the physical nucleon.

The method proposed differs from the method of strong-coupling approximation and employs the separation of the Hamiltonian of the interaction into two parts the first of which gives four "potentials" leading to group states containing by way of ground states the ground states of the four stable isobars of the physical nucleon; the second part of the Hamiltonian of interaction if it be small causes transitions between these four groups of states.

Card : 1/1

KROLIKOWSKI, W.

POLAND/Theoretical Physics - Quantum Field Theory

CIA-RDP86-00513R000826620013-

B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 2730

Author : Krolkowski, W.

Inst : Not Given

Title : The Separation of Non-Interacting Pion Degrees of Freedom in the Fixed-Source Theory.

Orig Pub : Bull. Acad. polon. sci., 1957, Cl. 3, 5, No 1, 59-63

Abstract : The work contains a separation of the system of all the oscillators of the pion field into the following three types: those "directly-interacting with a certain extended source (representing the nucleon), those "indirectly" interacting, and those non-interacting. There are nine types of oscillators interacting directly with the nucleon. According to the derivations in the preceding work their interaction is due to the second part of the interaction Hamiltonian. The system of these nine oscillators together with the source is considered as an approximate model of four isobars of the physical nucleon. The transitions between these states with the same isobar are due to the interaction operator obtained

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KROLIKOWSKI, W.

POLAND/Theoretical Physics - Quantum Field Theory

B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 2731

Author : Krolkowski, W.

Inst : Not Given

Title : Approximation for the Physical Nucleon in the Fixed-Source Theory

Orig Pub : Bull. Acad. polon. sci., 1957, Cl. 3, 5, No 3, 263-268, XXIII

Abstract : The author gives an approximate method for treating the model of the physical nucleon in the symmetrical pseudo-scalar theory with fixed source -- a theory proposed in the author's preceding work.

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KROLIKOWSKI, W.

POLAND/Theoretical Physics - Quantum Field Theory

CIA-RDP86-00513R000826620013-3

B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1958, No 2732

Author : Krolkowski, W.

Inst : Not Given

Title : An Estimate of Masses of Isobars of the Nucleon in the Fixed-Source Theory.

Orig Pub : Bull. Acad. polon. sci., 1957, Cl. 3, 5, No 3, 269-272, XXIII

Abstract : It is shown in the work that the masses of the four isobars in the symmetrical pseudo-scalar fixed-source theory (which are considered in earlier works) turn out to be equal to the masses of the four known types of baryons ( $N$ ,  $\Lambda$ ,  $\Sigma$ ,  $\Xi$ ) for sensible values of the coupling constant and the radius of the meson cloud of the physical nucleon.

Card : 1/1

POLAND/Theoretical Physics - Quantum Theory of Fields.

B

—~~Abstr~~ Jour : Ref Zhur Fizika, No 11, 1959, 24225

Author : Krolkowski, W.

Inst : Warsaw University; Institute of Nuclear Research,  
Polish Academy of Sciences

Title : On the Isobars of the Nucleon in the Fixed-Source  
Theory

Orig Pub : Bull. Acad. polon. sci. Ser. sci. math., astron. et  
phys., 1958, 6, No 6, 413-416, XXIII

Abstract : The author considers the symmetrical  $\pi$ -meson theory  
with fixed source. Expanding the  $\pi$ -meson operators in a  
complete system of radial and angular (spherical func-  
tions) and assuming that the distribution of the source  
is spherically-symmetrical ( $\rho(x) = \rho(r)$ ) the author  
eliminates from the Hamiltonian of the system all the

Card 1/2

POLAND/Nuclear Physics - Elementary Particles.

C

Abs Jour : Ref Zhur Fizika, No 11, 1959, 24441

Author : Krolikowski, W.

Inst : Warsaw University; Institute of Nuclear Research, Polish Academy of Sciences.

Title : On the Weak Interaction of Elementary Particles.

Orig Pub : Bull. Acad. polon. sci. Ser. sci. math., astron. et phys., 1958, 6, No 6, 417-421

Abstract : It is assumed that the bosons with integral isotopic spin in strong interactions change their isotopic properties upon transition to weak interactions, acquiring a half-integral isotopic spin and a corresponding strangeness. To expand this principle to include  $\pi$  mesons it is necessary to introduce a second  $\pi$  meson, which is an isotopic singlet in strong interactions. The remaining

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POLAND/Nuclear Physics - Elementary Particles.

C

Abs Jour : Ref Zhur Fizika, No 11, 1959, 24441

systems or particles retain their isotopic spin and strangeness upon going over to weak interactions. Under these assumptions, the selection rule of Gell-Mann for weak interactions  $|\Delta S| = 1$  or  $|\Delta T_3| = 1/2$  is replaced by the conservation law  $\Delta S = 0$  or  $\Delta T_3 = 0$ . Lagrangians are constructed for weak interactions, so as to satisfy this conservation law. It is shown that the proposed theory of weak interactions leads to the observed processes of decay of elementary particles and explains the absence of other decay modes which have hitherto not been observed. -- V.A. Filimonov

Card 2/2

POLAND/Nuclear Physics - Installations and Instruments.  
Methods of Measurement and Research

C

Abs Jour : Ref Zhur Fizika, No 12, 1959, 26802

Author : Krolkowski, W.

Inst : University of Warsaw; Institute of Nuclear Research,  
Polish Academy of Sciences,

Title : On the Classification of Elementary Fermions

Orig Pub : Bull. Acad. polon sci. Ser. sci. math., astron et  
phys., 1959, 6, No 8, 523-527, XLII

Abstract : The author proposes a variant of the classification  
of elementary fermions, unifying baryons and leptons  
in four-dimensional isotopic-spin space. At certain  
supplementary assumptions, the table of the fermions,  
allowed in this version includes all the fermions  
known at the present time. -- V.D. Kukin

Card 1/1



KROLIKOWSKI, W.

"On the Elementary Particles and Their Strong Interactions," by W. KROLIKOWSKI, Institute of Theoretical Physics, University of Warsaw and Institute of Nuclear Research, Polish Academy of Sciences, Warsaw, Nuclear Physics, Vol. 8, No. 4, 1958 (Amsterdam), pp. 461-68.

Received 25 Jul 58.

POLAND/Theoretical Physics - Quantum Theory of Fields

B-6

Abs Jour : Ref Zhur - Fizika, No 2, 1959, No 2567

Author : Krolikowski Wojciech

Inst :

Title : Comparison of Meson Theory with Experiment

Orig Pub : Postepy fiz., 1958, 9, No 2, 151-158

Abstract : No abstract

Card : 1/1

POLAND/Nuclear Physics - Installations and Instruments.  
Methods of Measurement and Research:

C

Abs Jour : Ref Zhur Fizika, No 12, 1959, 26735  
Author : Krolkowski, Wojciech  
Inst : -  
Title : Conference on High Energy Physics Held in Geneva 30  
June -- 5 July 1958.  
Orig Pub : Postepy fiz., 1958, 9, No 6, 697-699  
Abstract : No abstract.

Card 1/1

*Krölikowski, W.*  
Distri: 4E30/4E3d

17  
Elementary particles and their strong interactions. W. Krölikowski (Inst. Badań Jądrowych, Warsaw). *Publ. Inst. Nucl. Res., Rept. No. 17/VII, 11 pp. (1958) (in English).*—A theory of elementary particles is proposed. Elementary particles are imagined as particular bound states related to ordinary bound states in such a way as spinning particles to ordinary rotators. This analogy is explored; operators of charge and strangeness are given. Fermions predicted corresponded to exptl. leptons and baryons. Generalization to  $K$  and  $\pi$  mesons is given and a math. form of description of strong interactions is discussed. J. Sierżak

3  
2

*pub.*

POLAND/Nuclear Physics - Installations and Instruments.  
Methods of Measurement and Research

C

Abs Jour : Ref Zhur Fizika, No 12, 1959, 26765  
Author : Krolkowski, W.  
Inst :  
Title : On the Second Neutral Pion  
Orig Pub : Bull. Acad. polon. sci. Ser. Sci. math., astron et  
phys., 1959, 7, No 2, 97-98  
Abstract : See Abstract No 26764.

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POLAND/Nuclear Physics - Elementary Particles

C

Abs Jour : Ref Zhur Fizika, No 4, 1960, 8000

Author : Krolkowski, W.

Inst : Warsaw University; Institute of Nuclear Research,  
Polish Academy of Sciences

Title : A Fixed-Source Approach to Scattering of Kaons

Orig Pub : Bull. Acad. polon. sci. Ser. sci. Math., astron. et  
phys. 1959, 7, No 4, 237-244

Abstract : The Chew-Low formalism has been modified as applied to  
the problem of scattering of K mesons by the nucleon N  
and by  $\Lambda$ ,  $\Sigma$ , and  $\Xi$  hyperons, which are considered  
as bound states of the K meson and baryon. The baryon  
is represented in the form of a fixed source having in-  
ternal degrees of freedom (spin, isotopic spin, stran-  
geness). On the basis of the formalism of strong

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POLAND/Nuclear Physics - Elementary Particles.

C

Abs Jour : Ref Zhur Fizika, No 4, 1960, 8000

interactions, the low equations are derived for the problem under consideration. Dispersion relations are obtained for the scattering amplitudes, corresponding to the S and P waves. The effective-radius approximation is considered. For the scattering  $N + K \rightarrow N + K$  (K mesons with isotopic spin  $T = 0$  and  $1$ ) in the state  $P_{3/2}$ , a resonance is observed in the region of high energies (approximately  $1$  to  $4 M_N$ ). -- V.A. Astaf'yev

Card 2/2

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POLAND/Theoretical Physics - Quantum Theory of Fields.

B

Abs Jour : Ref Zhur Fizika, No 4, 1960, 7771

Author : Krolkowski, W.

Inst : ~~Warsaw University, Institute of Nuclear Research,~~  
Polish Academy of Sciences.

Title : On Isobars of the Nucleon Caused by the Kaon Field in  
A Fixed-Source Theory.

Orig Pub : Bull. Acad. Sci. Ser. Sci. math., astron. et phys., 1959,  
7, No 4, 245-250

Abstract : The method of considering strong interactions, proposed  
by the author in one of his preceding papers (Referat  
Zhur Fizika 1959, No 11, 24225) is extended to include  
investigation of the interaction between a baryon, repre-  
sented as a fixed source, with the field of K mesons.  
The author's formalism is employed (Abstract 6000),

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POLAND/Theoretical Physics - Quantum Theory of Fields.

B

Abs Jour : Ref Zhur Fizika, No 4, 1960, 7771

which makes it possible to describe the nucleon N and the hyperons  $\Lambda^0$ ,  $\Sigma$ , and  $\Xi$  as states of a single particle -- the baryon B. From the part  $H^K + H^{BK}$  of the total Hamiltonian, by transformation and elimination of the amplitudes of the K mesons with orbital momenta  $l \neq 0$  and 1, an operator is separated, identified with Hamiltonian of the K-meson cloud, interacting with the core of the baryon. The internal degrees of freedom of the physical baryon are separated in this approximation into the following degrees of freedom: 1) of the baryon core; 2) of the pion cloud, and 3) of the K-meson cloud (the canonical coordinates and conjugate momenta of the S and P waves of the K mesons). The total Hamiltonian of the physical baryon is accordingly written out. The eigenstates of this Hamiltonian, identified with the states of the physical baryon, are classified in accordance with the eigenvalues of the total spin, the total

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POLAND/Theoretical Physics - Quantum Theory of Fields.

B

Abs Jour : Ref Zhur Fizika, No 4, 1960, 7771

isotopic spin, and the total strangeness. The possibility is predicted of the existence of high energy excited states of the nucleon (of the isobar type), due to the interaction of the baryon and the K meson. -- V.A. Astaf'ev

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KROLIKOWSKI, W.

A fixed-source approach to scattering of kaons; supplement. Bul Ac  
Pol mat 7 no.11:691-693 '59. (EBAI 9:10)

1. Institute of Theoretical Physics, Warsaw University, Institute for  
Nuclear Research, Polish Academy of Sciences. Presented by  
W.Rubinowicz.  
(Mesons)

KROLIKOWSKI, W.

Effective range approximation for scattering of kaons with scalar  
coupling. Bul Ac Pol mat 7 no.11:695-697 '59. (EEAI 9:10)  
(Mesons)

KROLIKOWSKI, W.

On the vector bosons. Bul Ac Pol mat 7 no.12:729-731 '59. (EEAI 9:10)

1. Institute of Theoretical Physics, University of Warsaw and Institute for Nuclear Research, Polish Academy of Sciences. Presented by W. Rubinowicz.

(Mesons) (Bosons)

19  
Second neutral pion. W. Królkowski (Univ. Warsaw).  
Nuclear Phys. 10, 213-19 (1966). The charge parity of the  
hypothetical 2nd neutral pion is discussed, and a possibility  
of absence of strong interactions for this particle is pointed  
out.  
Norman R. Pickering

3 4E3C  
4E3d

AmL

19 3  
Universal Fermi interaction. W. Królakowski (Univ.  
Warsaw, Poland). *Nuclear Phys.* 11: 657-660(1969).—A  
formalism proposed previously (C.A. 53, 9820c) for elemen-  
tary particles was used to express the above interaction be-  
tween fermions in a concise form. Norman E. Pickering-  
TA

KROLIKOWSKI, W.

Scattering of kaons with  $KK\pi$  coupling in the fixed-source theory.  
Bul Ac Pol mat 8 no.1:63-66 '60. (EEAI 9:11)

1. Institute of Theoretical Physics, Warsaw University. Institute  
for Nuclear Research, Polish Academy of Sciences. Presented by  
W.Rubinowicz.  
(Mesons)



KROLIKOWSKI, W.

A possible mechanism of the high energy maxima in pion-nucleon cross sections. Bul Ac Pol mat 8 no.4:229-231 '60.

1. Institute of Theoretical Physics, University, Warsaw and Institute for Nuclear Research, Polish Academy of Sciences. Presented by W. Rubinowicz.

(Mesons) (Nuclear physics)

2

1. The first of the two main points of the report is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence. The second point is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence.

2. The first of the two main points of the report is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence. The second point is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence.

3. The first of the two main points of the report is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence. The second point is that the Soviet Union is a "superpower" and that it is the only power capable of maintaining a global presence.

WOLINSKI, W.

SURNAME (in caps); Given Names

Country: Poland

Academic Degrees: Not stated

Affiliation: Institute of Theoretical Physics, Warsaw University (Instytut Fizyki Teoretycznej, Uniwersytet Warszawski) and Institute of Nuclear Research (Instytut Badań Jądrowych), Polish Academy of Sciences. (Polska Akademia Nauk)

Source: Warsaw, Bulletin de l'Académie Polonaise des Sciences, Série des Sciences Mathématiques, Astronomiques et Physiques, Vol 9, No 2, Feb 61, pp 105-106.

Data: "Pionic Gauge."

S/058/62/000/005/017/119  
AC01/A101

AUTHOR: Krolkowski, W.

TITLE: A possible mechanism of the  $D_{3/2}$ ,  $T = 1/2$  resonance in pion-nucleon scattering

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 39, abstract 5A345  
("Bull. Acad. polon. sci. Ser. sci. math., astron. et phys.",  
1961, v. 9, no. 4, 303, English; Russian summary)

TEXT: It is demonstrated that the existence of the  $D_{3/2}$ ,  $T = 1/2$  resonance  
(when any other D-resonances are absent) does not contradict the mechanism of  
nucleon excitation proposed earlier by the author (RZhFiz, 1961, 2A302, 5A364).

[Abstracter's note: Complete translation]

Card 1/1

KROLIKOWSKI, W.

Note on unitary symmetry and leptonic hyperon decays. Bul Ac  
Pol mat 10 no.14, 595-599 '62.

1. Institute for Nuclear Research, Polish Academy of Sciences,  
Warsaw, and Institute of Theoretical Physics, University, Warsaw.  
Presented by W. Rubinowicz.

KROLIKOWSKI, W.

Universal Fermi interaction and rotational symmetry. Acta  
physica Pol 22:Suppl.:51-57 '62.

1. Institute for Nuclear Research, Polish Academy of Sciences,  
Warsaw, and Institute of Theoretical Physics, University, Warsaw.

PROJEKT, D.

Remarks on SU<sub>3</sub> triplets. Bul 40 Pol Mat 14 no. 1:33-341 1964.

J. Institute of Nuclear Research, Polish Academy of Sciences,  
Warsaw, and Institute of Theoretical Physics, University, Warsaw.  
Presented by M. Rabinowitz.

KROLIKOWSKI, W.

Hypercharge and the  $U_2$  group. Bul Ac Pol math 12 no.9:  
573-575 '64.

1. Institute for Nuclear Research of the Polish Academy of  
Sciences, Warsaw and the Institute of Theoretical Physics  
of the University, Warsaw. Presented by W. Rubinowicz.



KROLIKOWSKI, W.

Unitary symmetry and  $\Delta I = \frac{1}{2}$  rule. Acta physica Pol 26 no.6:  
1163-1168 '64.

1. Institute for Nuclear Research of the Polish Academy of  
Sciences, Warsaw, and Institute of Theoretical Physics of  
Warsaw University. Submitted May 21, 1964.

KROLIKOWSKI, W.

On Bjorken--Hellsen transformation. Bul Ac Pol math 13  
no.1:77-78 '65.

1. Institute for Nuclear Research of the Polish Academy of  
Sciences, Warsaw, and Institute of Theoretical Physics of  
the Warsaw University. Submitted November 16, 1964.

KROLIKOWSKI, W.

Unitary symmetry and  $\Delta I = \frac{1}{2}$  rule. Acta physica Pol 27 no.2:  
355-357 P '65.

1. Institute for Nuclear Research of the Polish Academy of  
Sciences, Warsaw, and Institute of Theoretical Physics of  
the Warsaw University. Submitted September 26, 1964.



# P O L

3:78

(54) 163251

Królikowski W., Hławinkowski, H. The Influence of the Consistency of Margarine on the Composition of the Fat Mixture

"Zależność konsystencji margaryny od składu i nowy tłuszczowca" (Prace Gl. Inst. Przem. Roln. i Spok. No 3), Warszawa, 1954, PWT, 11 pp. 14 figs, 23 tabs.

Several methods of examining the consistency of fats were studied and it was found that, for practical purposes, penetrometric methods are the most suitable. A number of laboratory mixtures of fats, margarine and margarine base, butter and butter base were examined by means of a Richardson-Holde penetrometer. It was noted that the consistency of mixtures was lighter for greater content of highly fusible components. Margarine base containing coconut oil was softer and more like butter in consistency than was the case with margarine base without coconut oil, but containing up to 35% liquid fat. The use in margarine production of 30% liquid fats, causing a reduction of the melting temperature of the base by 2-4°C, offers no difficulties. The consistency of margarine appears to be in direct proportion to the consistency of its base.



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Distr: hE2c(j)

Properties of glass-fiber-reinforced polyester laminates.  
Wachow Kozlikowski. Tworzywa-Guma-Laktery 4, Nos.  
8-9, 220-8(1959).—The mech. properties of laminates are  
discussed and the results of tensile, impact, and shear tests  
given. The effect of sea water on products made from these  
materials is described.  
P. L. Relidinski

15 2  
1-77(NB)

S/091/62/000/008/047/057  
B166/B161

AUTHOR: Królikowski, Wacław

TITLE: On the durability and fatigue strength of glass-reinforced plastics based on polyester resins

PERIODICAL: Referativnyi zhurnal. Khimiya, no. 8, 1962, 553, abstract 8P39 (Tworzywa wielkocząsteczkowe, v. 6, nos. 7 - 8, 1961, 212 - 218)

TEXT: Review. Work on tests for durability, creep and fatigue properties of glass-reinforced plastics based on unsaturated polyester and certain other resins is examined. 8 references. [Abstracter's note: Complete translation.] ✓

Card 1/1

KROLIKOWSKI, Wacław (Gdynia)

Poland's production of boats made of glass reinforced polyester.  
Tworzywa wielkocząst 6 no.11:367-371 N '61.

KROLIKOWSKI, Wacław (Gdynia)

Production of boats from glass reinforced polyester laminates in  
Poland. Pt. 2. Polimery 6 no.12:396-399 '61.

KLOSOWSKA, Z.; KROLIKOWSKI, W.

Polyester resins and their processing. A conference in Berlin, September 26-30, 1961. Polimery tworzywa wielocząst 7 no.2:56-58 F '62

KROLIKOWSKI, Wacław (Gdynia); DULSKI, Leszek (Gdynia)

A national Polish conference on the production and properties  
of glass reinforced polyester laminates. Polimery tworzą  
wielk 7 no.6:196-199 Je '62.

KROLIKOWSKI, Wacław (Gdynia); DUDZINSKA, Stanisława (Gdynia)

Glass fiber reinforced polyester laminates with increased  
styrene content and talc as filler. Polimery tworzą wielk  
7 no.10:373-376 0 '62.



311:53

G/004/62/C09/002/002/004  
D029/D109

15. 8350  
15. 8450

AUTHOR: Krolikowski, W., Magister - Engineer (Sopot - Poland)

TITLE: Some properties of macroscopically inhomogeneous glass-fiber-reinforced plastics

PERIODICAL: Plaste und Kautschuk, vol. 9, no. 2, 1962, 61 - 65

TEXT: The author defines "macroscopically inhomogeneous" material as glass-fiber-reinforced plastics where the glass-fiber reinforcement exists in tissue or mat form. Such material is composed of various layers which have very differing properties. Examinations concerning mechanical properties were carried out on ten test plates made of polyester resin "Polyleit 8001", roving tissue 19-S-4 (satin binding 400 g/m<sup>2</sup>) and glass silk mat "Stratimat" (450 g/m<sup>2</sup>). The glass contents amounted to 44 - 48 weight percent. Mechanical testing showed the following results: 1) Short-time tensile strength of mixed reinforced laminates does not follow a linear law. The calculated values, however, lie on a straight line. Resulting differences are small so that the stated computation method may be considered as a sufficient approximation. 2) Short-time bending resistance changes

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G/004/62/009/002/002/004  
D029/D109

Some properties of .....

in jumps. This results from the differing position of the reinforcing material mat and tissue towards each other and to the neutral fiber. Optimum strength results from equal parts of tissues and mats in the mixed reinforced laminate. Stratified material reinforced only with tissues tend to delamination and, therefore, have a lower bending resistance. 3) Tissue-reinforced laminates have a lower impact strength. Optimum values result in the case of mixed reinforcements with a ratio tissue/mat = 3:1. 4) The elongation of laminates with mixed reinforcements is lower than that of laminates reinforced only with mat or tissue. 5) In the case of laminates reinforced with mat and tissue at a ratio 1:1, two elasticity moduls are observed. Elongation tests carried out on laminates reinforced with glass silk mats, tissues, and mixtures (mat/tissue = 5:4) showed the following results: 1) All laminates tested have load-deformation diagrams which represent two rectilinear sections, from which there result two different elasticity moduls. 2) Breaking elongation of laminates reinforced with glass silk mats, tissues or mixtures are nearly equal. The experiments showed 2.0 - 2.2%. 3) The first rectilinear section of the elongation diagram which determines the elasticity modul  $E_1$  is equal for all three kinds of reinforcements (with equal glass

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D029/D109

Some properties of ,.....

contents). 4) The second rectilinear section of the elongation diagram which determines the elasticity modul  $E_2$  has a different tilt for each of the three kinds of reinforcements. That means that the second elasticity modul differs according to the reinforcements. 5) Laminates reinforced with tissue have the highest elasticity modul; mat-reinforced stratified material has the lowest values. 6) The first proportionality limit is the highest for tissue-reinforced laminates and the lowest for mat-reinforced stratified material. 7) The second proportionality limit is the lowest for tissue-reinforced laminates; optimum values result for mat reinforcements. 8) There is a possibility that the tilt angle of the first rectilinear section is determined by the properties of the resin. Further investigation concerning this point is going on in Poland. There are 5 figures and 4 tables. ✓

SUBMITTED: June 21, 1961

Card 3/3

15.8450

39527  
C/004/62/009/008/001/003  
D029/D109

AUTHOR: Królikowski, W., Magister Engineer (Gdynia, Poland)

TITLE: The stress/deformation diagram of glass-fiber-reinforced polyester resins

PERIODICAL: Plaste und Kautschuk, vol 9, no. 8, 1962, 389 - 391

TEXT: Experiments were carried out with Polimal 109 resin, produced by the Polish "Saryna" plant, and glass silk mat Stratimat P-3 M 1 600 g/m<sup>2</sup>, produced by the French Société du Verre Textile, to close a gap in literature concerning stress and deformation values of composed laminates. The deformation characteristic is independent of the type of glass reinforcement: An increase of the glass content increases both E-moduls, the proportionality limits, and the tensile strength. This effect is important for axially reinforced laminates where all glass fibers are subject to stress. A glass content of over 60% and parallel position of all glass fibers cause the characteristic to be a straight line. Both proportionality limits disappear. If the glass content is reduced by 25%, the characteristic becomes similar to that of pure resin. The values

Card 1/2

The stress/deformation diagram .....

G/004/62/009/008/001/003  
D029/D109

of the second proportionality limit of laminates with varying glass contents are approximately constant at 82 - 87% of the tensile strength. The values of the first proportionality limit vary between 30 and 49%. Deformations corresponding to the first proportionality limit are independent of the type and quantity of the reinforcement, and amount to approximately 0.45 - 0.65%. The breaking strength increases with an increasing glass content up to a certain value. It increases insignificantly with an increased content of elastic resin, and decreases if the content of resin surpasses 20%. Tensile strength and E-modul values increase with an increasing glass content and decrease with an increased resin content. The E-modul values are constant at a resin content of a little over 35%. Conclusions: The deformation diagram depends on the glass content and on the type of resin. The proportionality limits disappear if the glass content is very high or very low, and if the elasticity of the resin is very high. In each of these cases the properties of one of the components of the laminate prevail. There are 6 figures and 3 tables.

SUBMITTED: December 29, 1961

Card 2/2

G/004/62/009/010/003/003  
D029/D109

AUTHOR: Krolkowski, W., Magister-Engineer, (Sopot) Poland

TITLE: Influence of water on the stress/deformation diagram of glass-fibre-reinforced polyester resins

PERIODICAL: Plaste und Kautschuk, v. 9, no. 10, 1962, 495 - 496

TEXT: Due to want of publication of adequate examinations, the author examined the influence of water on glass-fiber-reinforced polyester resins in order to determine the safety coefficient for laminates used in boat building. Test bodies consisted of bars (800 x 15 x 7 mm) made from a plate of Polyleit 8001, produced by RCI Reichhold Chemie AG, Hamburg, reinforced either with glass silk at Stratimat, produced by Société du Verre Textile, Chamber, or with glass silk texture 19-S-4, produced by Société du Verre Tisse, Paris. A 100 day storage in water and subsequent wet testing showed a tensile strength of 1272 kp/cm<sup>2</sup> if Stratimat was used, and 1965 kp/cm<sup>2</sup> if 19-S-4 was used. Tests after drying showed 1435 kp/cm<sup>2</sup> (Stratimat) and 2423 kp/cm<sup>2</sup> (19-S-4). Stress/deformation diagrams in all three test varieties (dry, wet and subsequently dried, and wet)

Card 1/2

Influence of water on the stress/deformation ..... G/004/62/009/010/003/003  
D029/D109

of the glass silk mat laminates do not show any differences. The 100-day water storage was without influence on the elasticity moduls. After drying, the original strength was reached again. No structural changes of the laminate occurred. The low tensile strength of the wet tests is probably due to the temporary reduction of the glass-resin bonds caused by the "lubricating" effect of water molecules. Tissue-reinforced laminates showed a stronger influence of water. The stress/deformation diagram shows three different curves for the three test groups. Apart from the tensile strength, the elasticity moduls are lowered, too. It must be assumed that the water has a "plastifying" effect. Well made and hardened laminates show almost no permanent changes under water influence. It is possible that laminates which are stressed over and above the original first proportionality limit have a lower water resistance. This would be of decisive importance for the determination of the safety coefficient in boat building. Examinations will be continued. There are two figures and two tables.

SUBMITTED: February 15, 1962

Card 2/2

KROLIKOWSKI, Wacław; DUDZINSKA, Stanisława; KOZŁOWSKI, Jerzy (Gdynia)

Polyester resin deck coverings for open decks made of hydronalium  
Bud okretowe Warszawa 8 no.1:16-18 Ja '63.



KROLIKOWSKI, W.

Third International Reinforced Plastics Conference, London,  
November 28-30, 1962. Polimery tworzyw wielk 8 no.5:211-213 My '63.

KROLIKOWSKI, Wacław (Gdynia)

Properties of laminates prepared from Polimal 109, the  
Polish polyester resin. Polimery tworzą wielk 9 no. 1:  
11-14 Ja '64.

KROLIKOWSKI, Wacław, mgr inż.; MASLANKA, Tadeusz

Glued joints of polyester glass laminates. Bud okr. tow. Warszawa  
10 no.1:18-19 Ja '65.

1. Navy Shipyard, Gdynia.

"Possibilities of seeding tubers on wastelands."

Nowe Rolnictwo, Warsaw, Vol 3, No 7, July 1954, p. 127

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KROLINKOWSKA, E.; OLPINSKA-WARZECZOWA, K.

Polish bibliography on oceanography for the years 1945-1960 (supplement II)  
Przegl geofiz 6 no.3:217-218 '61

1. Zaklad Geofizyki, Polska Akademia Nauk, Warszawa.

ZSIRNOV, N.I. [Zhirnov, N.I.], a muszaki tudományok kandidátusa;  
KROLJ, L.B. [Krol', L.B.] a muszaki tudományok kandidátusa;  
LIBSIC, E.M. [Libshits, E.M.], mernok; RABKIN, Ju.I. [Rabkin,  
Yu.i.], mernok

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KROLL, G. Ya. (Tartu)

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My '59. (MIRA 12:8)

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(NERVES, SPINAL, dis.

radiculitis, lumbosacral, ther., massage per rectum (Rus))

(MASSAGE, ther. use

radiculitis, lumbosacral, massage per rectum (Rus))

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Tomasz Drobnik, m.d., 1858-1901. Polski przegl. chir. 3/4 no.2:  
159-170 '62.

1. Z III Kliniki Chirurgicznej AM w Poznaniu Kierownik: prof. dr  
A. Piskorz.

(BIOGRAPHIES)



MAJEWSKI, Czesław; KROLL, Józef; PRZYBYL, Leszek

A case of chronic "reticuloendotheliosis". Pat. Pol. 15 no.4:  
553-560 O-D '64.

1. Z Zakładu Anatomii Patologicznej Szpitala Miejskiego imeni  
J. Strusia w Poznaniu (Kierownik: dr. med. Cz. Majewski) ; z  
III Kliniki Chirurgicznej Akademii Medycznej w Poznaniu (Kie-  
rownik: prof. dr. med. A. Piskorz) i z III Kliniki Chorob  
Wewnętrznych Akademii Medycznej w Poznaniu (Kierownik: doc. dr.  
med. K. Wysocki).

JURCZYK, Witold; KROLL, Jozef...

On the restoration of respiratory and circulatory functions  
in early Polish literature. Pol. tyg. lek. 19 no.50:1944-1946  
14 D '64.

1. Z Kliniki Chirurgicznej i Zakładu Anestezjologii przy I<sup>ty</sup>  
Katedrze Chirurgii Akademii Medycznej w Poznaniu (Kierownik  
Katedry: prof. dr. med. Adam Piskorz).

FRÖL, Jozef; LEJA, Zbigniew

Treatment of anemias in surgical patients. Pol. przeł. chir.  
36 no.8:975-982 Ag '64.

1. Z III Kliniki Chirurgicznej Akademii Medycznej w Poznaniu  
(Kierownik: prof. dr A. Piskorz).

✓ Application of the phenyl phosphate method to soil and  
analysis to soils and fertilizers. *Landw. Jahrb.*, 1934, 10, 1-10.  
AC, Kramer, and Brackel, L. (Agr. Chem. Soc. Germany, Berlin).  
Bodenfrucht. *Archiv für Pflanzenernährung*, 1934, 1, 1-10.  
With phenyl phosphate as a substrate, the phosphatase activity  
of soils and fertilizers do not bind the phosphate group, but  
adsorption is detectable. The method is suitable for determining  
phosphatase activity. Cells do not adsorb phosphate, but  
at their original pH value. *Memoirs of the Royal Society of  
London*, 1934, 1, 1-10.

✓ Effect of clay minerals on the enzyme activity of soil phosphatase. (L. Kroll and M. Krämer (Agrochem. Versuchsanst., Budapest). *Veterinärwesen* 42, 557-56 (1955) —  
 (1) The effect of various clay constituents on soil phosphatase was tested by detg. the liberation of  $\text{PhOH}$  from phenyl phosphate. By using sand, loam and clay soils 10 g. air-dry soil (1-mm. screen) was mixed with 2.5 cc. toluene in a 100-cc. flask and after 10 min. 20 cc. dimethyl phenyl phosphate (0.5% soln). After 23 hrs. incubation the flask was filled to 100 cc. with dist. water of 37°, incubated for another hr., and filtered. By calg. liberated phosphate from free  $\text{PhOH}$  and detg. inorg. phosphate directly with  $\text{Mo}$  sulfate- $\text{SnCl}_2$ , it appeared that the  $\text{P}_2\text{O}_5$  directly detd. as a percent of the total  $\text{P}_2\text{O}_5$  calcd. from  $\text{PhOH}$  detcs. decreased in all cases sharply upon addn. to the soils of up to 50% montmorillonite or kaolinite. The amt. of  $\text{PhOH}$  found did not vary with the addn. (34 mg. for clay, 17 for sand, 15 for loam) and only depends on the original soil. The free  $\text{P}_2\text{O}_5$  dropped with clay from 13 to 11  $\mu\text{g}$ . per 100 cc. for sand from 10 to 4, for loam from 4 to 2 upon addn. of 50% montmorillonite. The adsorption of  $\text{P}_2\text{O}_5$  by the montmorillonite or kaolinite causes the change in values. Previous work by Morland and Gieseking (C.A. 49, 52384) in which  $\text{P}_2\text{O}_5$  detcs. were used to det. phosphatase activity gives obviously distorted values.

B. J. C. van der Hoeven

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KIKULI, Ye. N., Inzh.; I. P. KIKULI, I. A. KIKULI, I. A. KIKULI.

Study of the caking process of nitrate compounds obtained  
from technically pure preparations. Izv. Vsesoyuznogo  
no. 24:105-127 1964. (1964 18:7)

Dr. N. N. Zakharenko, D.Sc., doktor tekhn. nauk, prof.; Y. I. Ilyin, D.Sc., prof.

Diffusion expansion of synthetic milite materials. I part  
NIISTroikeranski no. 24:133-157 '64. (MIRA 13:7)

SWINARSKI, Antoni; KROLL, Zygfryd

The binding mechanism of hydrogen sulphide by pure ion oxides and hydroxides. Pt. 1. Chemia stosow 5 no.3:383-394 '61.

1. Katedra Chemii Nieorganicznej, Uniwersytet im. Mikolaja Kopernika, Torun.



KROLL, Zygfryd; SWIŃNARSKI, Antoni

Mechanism of reaction between hydrogen sulfide and pure oxides  
and ferric hydroxides. Pt. 4. Chemia stosow 8 no. 2:209-222 '64.

1. Department of Inorganic Chemistry, Nicholas Copernicus  
University, Torun.

KROLL, Zygfryd; SWINARSKI, Antoni

Mechanism of hydrogen sulfide binding by pure ferric III  
oxides and hydroxides. Ft. 3. Chemia stosow 7 no. 2:209-222  
'63.

1. Katedra Chemii Nieorganicznej, Uniwersytet im. M. Kopernika,  
Torun.

KROLL, Zygfryd; SWINARSKI, Antoni

Mechanism of hydrogen sulfide binding by ferric oxides and hydroxides.  
Pt. 2. Chemia stosow 6 no.3:409-423 '62.

1. Katedra Chemii Nieorganicznej, Uniwersytet im. M. Kopernika,  
Torun.

KACLOP, Włodzisław, mgr. inż.

Humidity measurements with the application of the variable  
resistance sensing device. Pt. 1. Przegl. papier 18 no. 1: 19-22  
Ja '62.

1. Centralne Biuro Techniczne Przemysłu Papierniczego, Łódź.

GROTT, Andrzej; KROLOPP, Włodzimierz, mgr.inz.

Humidity measurements with the application of the variable  
resistance-sensing device. Pt. 2. Przegl papier 18 no. 3: 77-  
82 Mr '62.

1. Centralne Biuro Techniczne Przemysłu Papierniczego, Łódź.

KRUCLOPI, Włodzimierz, mgr inż.

The Z 15 type regulator and its application to temperature, level, concentration, and pressure control. Przegl papier 20 no. 4:102-106 Ap '64.

1. Central Engineering Bureau of the Paper Industry, Lodz.

KROLOPP, Włodzimierz, mgr. inż.; GROT, Andrzej

Methods and measuring devices with capacity detectors for measurements of the relative humidity. Przegl papier 18 no.7:222-225 J1 '62.

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1. Central Engineering Office of Paper Industry, Lodz.



KROLOPP, Włodzimierz, mgr inż.

Measurements of pH values by the new Dynacap pH-meter with  
A.C. amplifier. Przegl papier 21 no.3:72-75 Mr '65.

1. Central Engineering Office of the Paper Industry, Lodz.

KROLOVETSKIY, M.N., gornyy inzh.

Blasting operations with the use of air spaces. Vzryv. delo  
no.54/11:318-322 '64. (MIRA 17:9)

1. Baskunskanskiy kar'yer izvestnyaka, Kemerovskaya oblast'.

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Cytochemical studies on the leukocytic system in cases of infections hepatitis in children. *Pediat. polska* 34 no.7:911-918 July '59.

1. Z Pracowni Immunologicznej Kierownik: prof. dr.med. I. Lille-Szyszkowicz i z Oddziału Obserwacyjnego Kierownik: dr med. W. Winnicka Instytutu Matki i Dziecka w Warszawie Dyrektor Instytutu prof. dr. med. F. Groer.

(HEPATITIS INFECTIONOUS, blood) (LEUKOCYTES)

KROLUPPER, R.

Development of new technology in the brewing and malt industries.

P. 60, (Sbírka Vynálezů) Vol. 6, no. 3, Mar. 1957, Praha, Czechoslovakia

SO: Monthly Index of East European Accessions (EEAI) Vol. 6, No. 11 November 1957

MAKOV, K. A., Cand. Tech. Sci.; BULGAKOV, N. V., Cand Tech. Sci., Jr. Sci. Assoc.;

KROLYA, L. B., Cand. Tech. Sci.; PANASENKO, M. D., Cand Tech. Sci.

"Schaffung, Entwicklung und Untersuchung einer mit überkritischem Druck (300 ata)  
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10 January 1956, pg. 28.

E-2298

KROLYUNITSKAYA, T.L.; MAKAROVA, K.M.; MITTEL'SHTEDT, A.A.; KHRUSHCHEVA, Ye.A.

Vitamin B<sub>12</sub> therapy of lateral amyotrophic sclerosis. Zhur.nevr. i psikh. 56 no.4:319-322 '56. (MLRA 9:7)

1. Institut neurologii (dir.-prof. N.V.Kononov) AMN SSSR i  
Institut khirurgii (dir.-prof. A.A.Vishnevskiy) AMN SSSR, Moskva  
(AMYOTROPHIC LATERAL SCLEROSIS, therapy,  
vitamin B<sub>12</sub> (Rus))  
(VITAMIN B<sub>12</sub>, therapeutic use,  
amyotrophic lateral sclerosis (Rus))

KROLYUNITSKAYA, T.L.

Treatment of patients with lateral amyotrophic sclerosis with  
vitamin B<sub>12</sub>. Zhur.nerv.i psikh. 59 no.12:1447-1450 '59.

(MIRA 13:4)

1. Institut nevrologii (dir. - prof. N.V. Konovalov) AMN SSSR,  
Moskva.

(AMYTROPHIC LATERAL SCLEROSIS ther.)  
(VITAMIN B<sub>12</sub> ther.)

KROM, M. N., and CHERNOV, L. A.

"Diffraction Image Dependence on the Value of Fluctuations in the Incident  
Wave."

paper presented at the 4th All-Union Conf. on Acoustics, Moscow, 26 May - <sup>4</sup>2 Jun 58



AUTHORS: Krom, M.E. and Chernov, L.A.

SOV/45-4-4-7/20

TITLE: Effect of Fluctuations in an Incident Wave on the Distribution of Mean Intensity Near the Focus of a Lens (Vliyaniye flyuktuatsiy v padayushchey volne na raspredeleniye sredney intensivnosti vblizi fokusa linzy)

PERIODICAL: Akusticheskiy Zhurnal, 1958, Vol 4, Nr 4, pp 341-347 (USSR,

ABSTRACT: In acoustical and astronomical observations the presence of amplitude and phase fluctuations in the incident wave affects the diffraction image of a focusing system. It is found that the diffraction intensities fluctuate and the diffraction image itself depends strongly on the magnitude of fluctuations in the incident wave. The relationship between the quality of the diffraction image and the atmospheric turbulence is given in the form of an empirical table in Ref 1. Theoretical investigation of dependence of the mean distribution of intensities near the focus of an objective on the fluctuations in the incident wave was first discussed in a paper by Chernov (Ref 2). Chernov dealt with the case when fluctuations in the incident wave are due to passing of this wave through a medium with large-scale statistical variations of the refractive index. The lens in question

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SOV/46-4-4-7/20

Effect of Fluctuations in an Incident Wave on the Distribution of Mean Intensity  
Near the Focus of a Lens

was taken to be an aberrationless objective which transforms a plane wave into a convergent spherical wave. It is assumed that this objective does not introduce any changes in the distribution of fluctuations along the wave-front. Mathematical difficulties encountered by Chernov in dealing with this problem forced him to limit himself to the cases of very small and very large fluctuations in the incident wave. In practice the most common case is that of fluctuations which are neither very small nor very large. The present paper is a continuation of Chernov's work (Ref 2) and it gives, in the form of a series, the distribution of the mean intensity near the focus of the objective described above for fluctuations of arbitrary amplitude in the incident wave. At the focus dependence of the mean intensity on fluctuations is found in the closed form. The results are shown graphically. There are 4 figures and 5 Soviet references.

ASSOCIATION: Yaroslavl'skiy gosudarstvennyy pedagogicheskiy institut im. K.D.Ushinskogo  
(Yaroslavl' State Pedagogical Institute imeni K.D. Ushinskiy)

SUBMITTED: October 27, 1957

Card 2/2

## TABLE I BOOK EXPLANATION

007/0057

Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book I: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book II: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book III: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book IV: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book V: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book VI: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book VII: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book VIII: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book IX: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

Book X: Summary of the book: This book is intended for astronomers. It may be of interest to people who study the atmosphere and design of astronomical equipment.

AUTHOR: Krom, M.N.

SOV/46-5-1-7/24

TITLE: Field Fluctuations Near the Focus of a Lens (Flyuktuatsii polya  
vblisi fokusa linsy)

PERIODICAL: Akusticheskiy Zhurnal, 1969, Vol 5, Nr 1, pp 45-50 (USSR)

ABSTRACT: A diffraction image, produced by a focusing system, pulsates, if there are fluctuations of amplitude or phase in the incident wave. Such disturbances in the diffraction image of a star, due to atmospheric turbulence, were reported by Danshon and Kude (Ref 1). Field fluctuations near or at the focus of a lens were dealt with by Krasil'nikov and Tatarskiy (Ref 2), assuming that fluctuations in the incident wave are small. Chernov (Ref 3) found the spatial distribution of field fluctuations near the focus of a paraxial lens for arbitrary amplitude and phase of fluctuations in the incident wave. Because of mathematical difficulties, Chernov discussed conditions at the focus itself only in the cases of large and small fluctuations in the incident wave. In

Card 1/2

Field Fluctuations Near the Focus of a Lens

SOV/46-5-1-7/24

practice such fluctuations are usually neither small nor large. The present paper continues Chernov's work and reports calculations of the distribution of field pulsations near the focus of a large lens when the incident wave has fluctuations of arbitrary magnitude. The author also studied the dependence of the relative pulsations at the focus on the dimensions of the objective. The paper is entirely theoretical. Acknowledgments are made to L.A. Chernov who directed this work. There are 4 figures and 4 Soviet references.

ASSOCIATION: Yaroslavskiy gosudarstvennyy pedagogicheskiy institut im. K.D. Ushinskogo  
(Yaroslavl' Pedagogical Institute imeni K.D. Ushinskiy)

SUBMITTED: January 31, 1958

Card 2/2



KKOM, M. M.

Dissertation defended for the degree of Candidate of Physicomathematical Sciences at the Acoustic Institute in 1962.

"Effect of Fluctuation in Incoming Waves on the Diffraction Image of a Focusing System."

Vest. Akad. Nauk SSR. No. 4, Moscow, 1963, pages 119-145

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ITCACHENKO, G. YE., ENG.

Electric Engineering

From the work of the "TSFEb" of the trust Central Administration of  
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NECHAYEVA, Z.P.; KROMAPENKO, G.N., kand.med.nauk; EPSTEYN, G.Ya., prof.;  
KURILO, A.A.; PRIKHOD'KO, A.; MEZHENINA, Ye.P., kand.med.nauk

Reports on meetings of societies of traumatologists and ortho-  
pedists. Ortop.travm.i protes. 20 no.4:85-91 Ap '59.

(MIRA 13:4)

(ORTHOPEDIC SOCIETIES)

CZECHOSLOVAKIA/Cultivated Plants - Medicinal. Essential Oils.  
Toxins.

M-8

Abs Jour : Ref Zhur - Biol., No 7, 1958, 30109

Author : Kronar, J.

Inst : -

Title : Medicinal Plants of Slovenia.

Orig Pub : Farmac. vest., 1956, 7, No 5-6, 73-77 (Sloven.)

Abstract : No abstract.

Card 1/1

- 54 -

KROMAR, Janez (Ljubljana)

Some peculiarities in relation to the cultivation of certain medicinal plants in Slovenia. Farmaceut gl Zagreb Supplement (18) no.5:26 '62

KAVANAGH, Anita, mr.; KREMER, James, mr.; NUGENT, G., mr.; PERRY, Minnie,  
mr.; WARBA, Susan, mr.; BOHLEN, Pavle, mr.

Book reviews. Farmaceut vest 11 no.10/12:251-259 '63.